



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/641,553

08/17/2000

YI-MIN WANG

1018.050US3

6337

22971

7590

06/08/2006

MICROSOFT CORPORATION
ATTN: PATENT GROUP DOCKETING DEPARTMENT
ONE MICROSOFT WAY
REDMOND, WA 98052-6399

EXAMINER

BAROT, BHARAT

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/641,553

Applicant(s)

WANG ET AL.

Examiner

Bharat N. Barot

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,8,10,18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,8,10,18 and 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 7-8, 10, 18, and 20-31 remain for further examination.

The old rejection maintained

2. Applicant's arguments with respect to claims 7-8, 10, 18, and 20-31 filed on March 10, 2006 have been fully considered but they are not deemed to be persuasive for the claims 7-8, 10, 18, and 20-31. The rejection is respectfully maintained as set forth in the last Office Action mailed on December 12, 2005.

Claim Rejections - 35 USC § 102(b)

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 7-8, 10, 18, 20-24, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Dolev (U.S. Patent No. 5,029,159).

Dolev's patent meets all the limitations for claims 7-8, 10, 18, 20-24, and 28-31 recited in the claimed invention.

5. As to claim 7, Dolev discloses a distributed system including a plurality of redundant components (see abstract; figure 1; column 1 lines 12-64; column 2 lines 4-15; and column 9 lines 48-59), and teaches a method for performance by a first redundant component (see summary of the invention), comprising: transmitting information (succession of signals) particular to the first redundant component to all other components in the plurality of redundant components, the information relating to one or more criteria according to which a currently-active leader component is to be determined (column 3 lines 9-18); receiving information from each other component in the plurality of redundant components particular to each component and relating to the one or more criteria according to which the currently-active leader component is to be determined (column 3 lines 18-21); and determining whether the first redundant component is the currently-active leader component by comparing the information particular to the first redundant component with the information received from each of the redundant components, wherein, if the first redundant component determines that it is not the currently-active leader component, the first component knows one of the component of in the plurality of redundant components is the currently-active leader component (figure 3; column 2 lines 42-61; column 3 lines 22-44; and column 6 line 47 to column 7 line 20).

6. As to claim 8, Dolev discloses that periodically repeating the method (figure 3; column 2 lines 57-61; column 3 lines 41-44; and column 7 lines 6-20).

7. As to claim 10, Dolev teaches that the transmitting the information particular to the first component comprises transmitting age information (terminal identification code) particular to the first component, and the receiving the information particular to the other components comprises receiving age information (terminal identification code) particular to the other components (column 6 lines 33-46).

8. As to claim 18, Dolev teaches that the determining whether the first component is the currently-active leader component comprises determining whether the first component is an oldest component (column 6 lines 24-32; and column 9 lines 48-59).

9. As to claims 20-23, they are also rejected for the same reasons set forth to rejecting claims 7-8, 10, and 18 above.

10. As to claim 24, Dolev teaches that the exchanging age information (terminal identification code) includes exchanging information regarding how long each component in the plurality of redundant components has been online (in the token ring) (column 6 lines 24-46; and column 9 lines 48-59).

11. As to claim 28-31, Dolev disclose that the redundant components are redundant executing processes, redundant class objects, redundant devices in an automation system, redundant nodes in a network (see abstract and summary of the invention; figure 2; and column 4 line 4-68)

Claim Rejections - 35 USC § 103(a)

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delve (U.S. Patent No. 5,029,159) in view of Badovinatx et al (U.S. Patent No. 5,699,501).

14. As to claims 25-26, Dolev does not disclose that the redundant components are redundant instances of a daemon.

Badovinatx et al disclose a distributed system including a plurality of redundant components (see abstract; figures 1-3; and column 3 line 34 to column 4 line 44) and also disclose that the redundant components are redundant instances of a daemon and the daemon is a system management daemon (column 4 line 29 to column 5 line 9; and column 6 line 20 to column 7 line 44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Badovinatx et al as stated above with the distributed system including a plurality of redundant components of Dolev because it would have provided an integrated framework for designing and implementing fault-tolerant subsystems or redundant components.

Art Unit: 2155

15. As to claim 27, neither Dolev nor BadovinatZ discloses that the daemon is a power line monitoring daemon. However, "Official Notice" is taken that the concept and advantages of using daemon as a power line monitoring daemon.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify combination of Dolev and BadovinatZ the concept of using daemon as a power line monitoring daemon because it would have provided consistent recovery of multiple subsystems or redundant components.

Response to Arguments

16. Applicant's arguments with respect to claims 7-8, 10, 18, and 20-31 filed on March 10, 2006 have been fully considered but they are not deemed to be persuasive for the claims 7-8, 10, 18, and 20-31.

17. In the remarks, the applicant argues that:

(A) Argument: (Page 7) Dolev does not describe the nodes on the token ring network as being redundant in any manner OR discuss the redundancy of any node in the token ring network; and also argue that the method of Dolev is not compatible with and will not function correctly in a first redundant component.

Response: Dolev explicitly describes that if a master terminal fails, the system recover by transfer of master terminal duties to a subservient terminal (column 1 line 65 to column 2 line 15) which implies that the redundancy of a node in the token ring

network; and also teaches that a leadership selection procedure (see summary of the invention and figure 3) which is compatible with and function correctly in a first redundant component.

(B) Argument: (Page 8) Dolev does not disclose that the transmitting of one or more criteria, or transmitting of any criteria at all.

Response: Dolev explicitly discloses that a first terminal transmitting in the token ring system a succession of signals to select a system leader (column 3 lines 3-18) which implies that the transmitting of one or more criteria; and Dolev also discloses that each signals has a terminal identification characteristic, but applicant specification state that the one or more criteria may or may not identify the component; therefore, the applicant arguments are deemed to be moot.

(C) Argument: (Page 8) Dolev does not disclose that the first redundant component determines that it is the currently-active leader component and also does not disclose a currently-active leader component.

Response: Dolev explicitly discloses that a terminal determines that it is the currently-active leader by mapping reference value with reference signal (figure 3; column 2 lines 42-61; and column 3 lines 3-40) and also discloses currently-active leader (column 2 lines 57-61; and column 3 lines 28-31 and 50-54) which implies the claimed invention; therefore, the applicant arguments are deemed to be moot.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.

Patent Examiner Bharat Barot

Art Unit 2155

June 01, 2006

Bharat Barot
BHARAT BAROT
PRIMARY EXAMINER